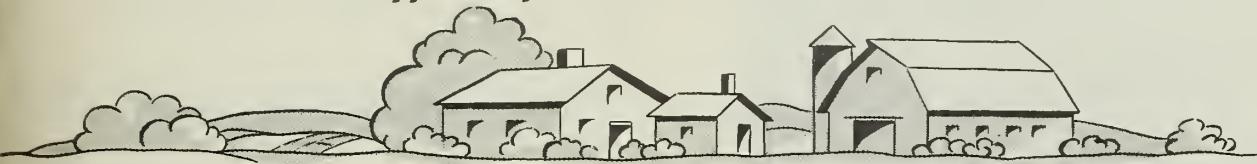


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

55
U.S. DEPARTMENT OF AGRICULTURE

Office of Information



Picture Story No. 77

For Release August 13, 1950

**SPINACH, KALE, AND COLLARDS:
MARKETING CHANGES SUGGESTED**



1. Harvesting spinach near Norfolk. Hand methods are generally used. Note heaped baskets.

If customers are right, Norfolk, Virginia, spinach, kale, and collards could arrive at destination in better condition. How this might be done with more efficient methods is the object of a study recently made, under the Research and Marketing Act of 1946, by V. V. Bowman of the Fruit and Vegetable Branch, Production and Marketing Administration, USDA.

Information obtained from Norfolk growers and shippers and from their

customers, who are the wholesalers and prepackers in terminal markets, provided the basis for most of the recommendations.

**SELLING TO DISTANT MARKETS CANNOT BE
DONE SUCCESSFULLY BY EVERYONE**

For years, many of the 40 or more individual growers have marketed large percentages of their own crops in distant cities with varying success.



2. Over-packed containers require "knee pressure," which bruises spinach and causes subsequent losses in marketing channels.



3. Hand-clipping spinach in the packing house for shipment to prepackagers. The combination of hand cutting the whole plants in the field followed by hand clipping in the packing house involves more labor and expense than field clipping or machine harvesting would involve.



4. Clipping by hand, above crown of plant, in the field eliminates one operation but requires more labor than machine harvesting.

They still do. Spinach acreage has been decreased to about one-third of that of a decade ago. The efficient marketing of these crops requires marketing facilities, information, and experience. Growers individually cannot supply these.

HARVESTING AND PACKING PRACTICES SHOULD KEEP UP WITH THE TIMES

Prepackers are buying greater quantities of spinach and kale. Present practices usually involve hand cutting and packing in the field; unpacking, clipping or stripping in packing houses; repacking; and shipment to prepackers who perform the third packing operation. Handing clipping in the field would save one operation. Machine harvesting would save even more labor. Machine harvesting and prepacking at Norfolk may be the ultimate goal, but prepacking in production areas for distant markets is considered to be in the experimental stage at present.

QUALITY DESERVES GREATER EMPHASIS

Consumers want quality; producers want quantity. Overstressing either reduces the other. And yet if growers and shippers would improve the quality of their shipments, consumers say they would buy greater quantities.

Even on the home farm, spinach of greenest hue and most crisp character loses face quickly when squeezed into an overpacked basket. Less bloating from unbalanced fertilizers and less water in the veins will reduce yields but will induce safe traveling for spinach. Quality starts with production, but too often it gets lost on the way to market. One of the first requirements at the packing house should be a trip over the grading belt.

LOWER COST PACKAGING SHOULD BE INVESTIGATED

The relatively bulky, low-priced kale and collards at one time rolled to

market in barrels. The bushel basket cramps their style as well as the producers' returns. A somewhat larger container, such as a wire-bound citrus crate, would be acceptable to many receivers, including spinach prepackers. Receivers who process, prepack, or retail Norfolk greens are primarily concerned with quality of the contents and say they will not insist upon growers investing more in containers than in the contents. The shipment of bunched kale and collards in used containers is an established practice. Growers and shippers should investigate their markets to determine the extent to which prepackers and receivers will be willing to accept larger containers, such as new or used wire-bound citrus crates.

SMALL RETURNS COME FROM BIG KALE AND COLLARD PLANTS

Large kale and collard plants are suited neither to bunching nor retailing in the whole plant form. Closer planting in the row will produce smaller plants without unduly reducing yields.

WINTER SPINACH HAZARDOUS, BUT HIGH IN PRICE

Growers favorably situated should strive to produce spinach for marketing in January, February, and March, when Northern markets have short supplies and pay highest prices.

PRECOOLING MAY REPLACE PACKAGE ICE

Precooled shipments, especially of clipped spinach and probably all forms of these greens, should be tried in the Norfolk, Virginia, area. Instead of package ice, a method of precooling such as an ice water bath, like that given celery, should give receivers more and better greens per container. If they like it, they'll pay for it.



5. Machine harvesting of spinach in the Norfolk area. Spinach clipped by this machine is canned locally, but this labor-saving method of harvesting might be used advantageously for harvesting spinach, and probably kale, for prepackaging.



6. Second crop from same plants! This field was harvested by machine 3 weeks before this picture was made; the plants will soon be ready for the second cutting.



7. Stripping kale, in the packing house, for shipment to prepackagers. The plant is held in one hand and the other hand does the stripping.



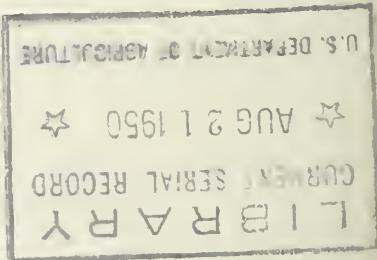
8. Stripping kale in the field permits the use of both hands for stripping, requires fewer containers, and leaves fewer forming residue on the land.



9. Packing bunched kale in used wire-bound citrus crates. The use of this crate for all the Norfolk greens would reduce container costs, but shipments should be limited to receivers who favor this container.



10. Icing baskets of spinach for shipment to market. Precooling may replace this.



11. Top-icing loaded truck. Tarpaulin will cover load on its way to market. Greens are also shipped by rail but truck shipments predominate from Norfolk.